

## INDEX OF SURGICAL PROGRESS.

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### GENERAL SURGERY.

**I. The Fatal After-Action of Chloroform.** By DR. OSTER-TAG. The author formulates his conclusions as follows: 1. After prolonged inhalation of chloroform, fatty degeneration of different organs, especially of the heart, liver, skeletal muscles, kidneys, and stomach occurs in animals of widely-different species. 2. The fatty degeneration is the result not only of the action on the blood, affecting the structure of the red blood-corpuscles; also a direct local action on the tissue-cells themselves. 3. Certain individuals show such great susceptibility to the action of chloroform by inhalation that they rapidly succumb to its influence. 4. The fatal after-effect of chloroform is attributable to paralysis of the heart, and it is evident by an anatomical degeneration of the myocardium, although in certain cases this may only with difficulty be detected, and to a gradual accumulation of carbon dioxide in the blood.—*Deutsche Medicinal Zeitung*, Jan. 16, 1890. *Therapeutic Gazette*, March 1890.

**II. The Antiseptic Value of Zinco-Cyanide of Mercury.** By Sir JOSEPH LISTER (London). At a meeting of the Medical Society of London the author reported that he had for a year been using in his wards at King's College Hospital a dressing that he recommended as the most satisfactory he had ever met. Upon repeated trial he had found a double cyanide of zinc and mercury to possess most important antiseptic properties. In the proportion of  $1/5000$  it kept blood-serum perfectly free from the development of organisms for eighteen days in spite of potent septic inoculation. Dressings were prepared by diffusing this "zinco-cyanide of mercury" in water, with a little glycerin added to fix it and prevent it from dusting out. In view of the very

slight solubility of the double cyanide in serum, some of the very soluble cyanide of mercury was associated with it. Some admirable results were got with this "cyanide gauze," but it was found to cause irritation of a peculiar kind, and suppurations also sometimes occurred at a late period of the case, such as Sir Joseph had never been accustomed to with carbolic dressings. It was found that this could be prevented by first saturating the gauze with the double cyanide and then putting it into a solution of starch. This fixed the particles of the cyanide most effectually in the gauze, subsequently the double cyanide and starch were prepared with sulphate of potassium; in this way the mixed salts could be powdered and easily diffused in water. This compound should be moistened before use with a  $\frac{1}{4000}$  solution of sublimate, so as to destroy any organisms there might be in the dressing. The layer destined to be put next the skin is washed in a solution of carbolic acid; this washes out the sublimate. By this means Sir Joseph Lister said he had obtained perfect results in practice in wounds of every description.—*London Medical Recorder*, November 20, 1889.

JAMES E. PILCHER (U. S. Army).

### III. Are our Common Dry and Impregnated Dressings Sterile and Can They Sterilize the Secretions of Wounds?

By EDWARD EHLERS. The writer has, like v. Eiselberg and Schlange, made bacterioscopic investigations of various antiseptic dressing-materials. Without going into details we merely direct attention to the results of these investigations:

1. Antiseptically prepared dressing materials, which are dried and kept in a dried state, cannot be regarded as sterile on account of the impregnation.
2. One should never depend entirely upon the impregnation, but the raw material should be boiled or steamed.
3. If one will use dry materials then they should be sterilized after drying, by some dry process.

The impregnated materials cannot be sterilized by means of steam as the antiseptic would be carried away by the vapor. The use of antiseptic dressings in a dry state is essentially a limited one on ac-